

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(Pursuant to NAC 445A.236)

Permittee Name: United States Air Force (USAF) 99th CES/CEV
4349 Duffer Drive, Suite 1601
Nellis AFB, NV 89191-7007

Permit Number: NEV20001

Location: Tonopah Test Range (TTR) Wastewater Treatment Facility (WWTF)
WWTF is located 32 miles SE of Tonopah, Nye County, Nevada
Latitude: 37° 52' 20" N, Longitude: 116° 47' 12" W
Township 1S, Range 46E, Section 11 NW ¼

Wellhead Protection Area: The TTR WWTF is not located within a wellhead capture zone or a drinking water protection area. No well logs are recorded in Township 1S, Range 46E, Section 11. The nearest section for this Township and Range in which a well was drilled is Section 13, located one section diagonally to the southeast of Section 11. In Section 13, a USAF test well indicated a static water level of 111 ft below ground surface.

General: TTR is a military installation, which is operated by the USAF. TTR generates wastewater flow from military housing and an Industrial Area. The Industrial Area wastewater flow is pre-treated via 29 (at last reported count) oil-water separators for the removal of oil and grease from equipment wash racks. Of the 29 units, 20 were reported in operation in 2007. After pre-treatment, the industrial wastewater flow is combined with the domestic wastewater flow at the head works for final treatment in the two aerated ponds. The wastewater in the aerated lagoons is treated via biological processes and discharged for evaporation at a zero-discharge WWTF, which is located approximately 32 miles southeast of Tonopah, NV in Nye County.

The WWTF consists of two lined partial-mix treatment ponds. The original treatment pond is identified as the Modified Aerated Facultative Lagoon and is a 1.33-acre, clay-lined (bentonite) pond, aerated with four (4) 7.5 Hp aerators. This treatment pond discharges secondary (biological) treated effluent to two HDPE-lined (60-mil thickness) evaporation ponds, which are 0.9 (West Evaporation Pond) and 1.2 acres (East Evaporation Pond) in area.

The new treatment pond is identified as the New Aerated Facultative Lagoon and is an 8.5-acre, HDPE-lined pond, aerated with four (4) 7.5 Hp aerators. Secondary treated effluent from this lagoon is discharged to a 5.0-acre, clay-lined evaporation pond (Remaining Large Evaporation Pond). At the last inspection NDEP inspection in 2005, the original treatment pond was offline and being maintained as a backup treatment lagoon. Presently, all influent flow is treated inside the New Aerated Facultative Lagoon.

Receiving Water Characteristics: This is a zero-discharge permit with no groundwater monitoring requirement.

Flow: The Division has approved design treatment capacities for the 30-day average and daily maximum periods at 0.375 and 0.672 MGD, respectively. Presently, for the first quarter of 2008, the reported 30-day average flow into the WWTF is 0.04 MGD, or only 10.7% of the total capacity of both treatment ponds. At this low flow demand, all treatment is in the newer lagoon.

Effluent Quality: Over the last one-year period, effluent quality discharging into the evaporation pond averaged the following: CBOD, 33 mg/l; and TSS, 49 mg/l. Secondary treatment standards for pond systems were met, e.g., odor control. For metals sampling, only one metal was detected: Barium, 0.019 mg/l. Effluent Total Petroleum Hydrocarbon (TPH) was detected at 0.4 mg/l. For groundwater discharge (not applicable here), the customary TPH limit is 1.0 mg/l (daily maximum).

Rationale for Permit Requirements: The Division's rationale for the proposed monitoring conditions is as follows:

- *Effluent Limits:* Although the treatment ponds have been designed to achieve secondary treatment, effluent limits are not established since there is zero-discharge to the groundwater (i.e., evaporation).
- *Annual Sampling:* Annual sampling of the Oil/Water Separators in the Industrial Complex is required to evaluate the oil and grease removal performance of the industrial pre-treatment program.

Proposed Effluent Limitations and Special Conditions:

Table 1 – Plant Discharge Limitations

PARAMETER	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30 - Day Average	Daily Maximum	Measurement Frequency	Sample Type
Flow, MGD (Influent) ¹	0.375	0.672	Continuous	Flow Meter
CBOD, mg/L (Influent) ¹	Monitor & Report		Quarterly	Composite
CBOD, mg/L (Effluent) ^{2,3}	Monitor & Report		Quarterly	Composite
TSS, mg/L (Influent) ¹	Monitor & Report		Quarterly	Composite
TSS, mg/L (Effluent) ^{2,3}	Monitor & Report		Quarterly	Composite
Total Petroleum Hydrocarbons, mg/L (EPA Modified 8015) (Effluent) ^{2,3}	Monitor & Report		Annually ⁴	Discrete
Arsenic, mg/L (Effluent) ^{2,5}	Monitor & Report		Annually ⁴	Discrete

Barium, mg/L (Effluent) ^{2,3}	Monitor & Report	Annually ⁴	Discrete
Cadmium, mg/L (Effluent) ^{2,3}	Monitor & Report	Annually ⁴	Discrete
Chromium, mg/L (Effluent) ^{2,3}	Monitor & Report	Annually ⁴	Discrete
Lead, mg/L (Effluent) ^{2,3}	Monitor & Report	Annually ⁴	Discrete
Mercury, mg/L (Effluent) ^{2,3}	Monitor & Report	Annually ⁴	Discrete
Selenium, mg/L (Effluent) ^{2,3}	Monitor & Report	Annually ⁴	Discrete
Silver, mg/L (Effluent) ^{2,3}	Monitor & Report	Annually ⁴	Discrete

- (1) Combined domestic and industrial flow at headworks.
- (2) Effluent samples from Modified Aerated Facultative Lagoon shall be required when there is a discharge to the West and/or East Evaporation Ponds. If no discharge occurred during the quarter, then "No Discharge" shall be indicated on the DMR Report.
- (3) Effluent samples from New Aerated Facultative Lagoon shall be required when there is a discharge to the Remaining Large Evaporation Pond. If no discharge occurred during the quarter, then "No Discharge" shall be indicated on the DMR Report.
- (4) Samples to be taken mid-week (T, W or TH) in the 1st Quarter.

**Table 2 - Oil/Water Separator Monitoring
(Required for each¹ Oil/Water Separator operated in the Industrial Complex)**

PARAMETER	DISCHARGE LIMITATIONS	MONITORING REQUIREMENTS	
		Measurement Frequency	Sample Type
Total Petroleum Hydrocarbons, mg/L (EPA Modified 8015)	Monitor & Report	Annually ²	Discrete
Arsenic, mg/L	Monitor & Report	Annually ²	Discrete
Barium, mg/L	Monitor & Report	Annually ²	Discrete
Cadmium, mg/L	Monitor & Report	Annually ²	Discrete
Chromium, mg/L	Monitor & Report	Annually ²	Discrete
Lead, mg/L	Monitor & Report	Annually ²	Discrete
Mercury, mg/L	Monitor & Report	Annually ²	Discrete
Selenium, mg/L	Monitor & Report	Annually ²	Discrete
Silver, mg/L	Monitor & Report	Annually ²	Discrete

- (1) Each Oil/Water Separator operated in the Industrial Complex and discharging to the WWTF shall be separately sampled once per year. Samples are to be taken from the discharge of the O/W Separators.
- (2) Samples to be taken mid-week (T, W or TH) in the 1st Quarter.

Schedule of Compliance: According to the Division's Compliance Tracking System (database), a revised Operations & Maintenance (O&M) Manual for this facility was approved by the Division on June 5, 2003. The signed application form states no that there has been no changes made to the design or operation of the WWTF since submittal of the approved O&M. In addition, the facility is operated with M&R effluent requirements due to zero-discharge requirements. Therefore, for this renewal, the Division is not proposing a SOC requirement.

Procedures for Public Comment: The Notice of the Division's intent to issue (renew) a permit authorizing the operation of this Wastewater Treatment Facility, subject to the conditions contained within the permit is being sent to the **Tonopah Times-Bonanza & Goldfield News** and **Las Vegas Review-Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is Friday, July 11, 2008, by 5:00 P.M.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination: The Division has made the tentative determination to issue (renew) the proposed zero-discharge permit for a period of five (5) years.

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Date: June 3, 2008